1878.]

# 2. On a new Species of Gazelle from Western Africa. By Earlan? Sir VICTOR BROOKE, Bart., F.Z.S.

### [Received November 19, 1878.]

## (Plate LVI.)

I have the pleasure of bringing before the notice of the Society a new and exceedingly interesting form of Gazelle. As is well known, the different species into which the genus *Gazella* is divisible (vide P. Z. S. 1873, p. 535) resemble each other so closely that it is often very difficult to define them. The differences exist in nature, let their taxonomic value be what it may; but in many cases they absolutely baffle verbal description.

In the form at present under consideration there is no such difficulty. Although the materials at my command consist only of the skulls of three males, with a small portion of the skin of the head attached to one of them, characters are apparent which separate the form from all known Gazelles. Indeed my only doubt is as to whether the species should not constitute the type of a new subgenus. The specimens belong to Mr. Gerald Waller, and it is through his courtesy that I have the opportunity of exhibiting them this evening. Mr. Waller tells me that the skulls were procured on the mainland of Africa, north of the island of Zanzibar, about lat. 3° S. and long. 38° E. He is unfortunately unable at present to give any further particulars respecting the species.

The new Gazelle differs from all hitherto described species in the very great backward prolongation of the occiput. This extension is is principally gained by the great size of the supraoccipital bone and the prominence of the occipital crest. The skull is much more depressed, the facial axis forms a more obtuse angle with the cranial axis, and the rami of the lower jaw are more slender than in any known Gazelle. The ascending rami of the præmaxillæ are remarkably thick, and do not nearly reach the nasals. In all other Gazelles the molars and premolars are decidedly hypsodont; in the new species they are as decidedly brachyodont, and, in comparison with the skull, remarkably small. The horns do not differ greatly from those of Gazella dorcas; they are, however, more massive and more laterally compressed. The skin of the head is of a uniform foxy red, with white marks under the eye. Mr. Waller has expressed a desire that the species should be named after his brother, who lost his life in Africa. I have therefore much pleasure in proposing the name Gazella walleri for the new form.

The following table of the comparative dimensions of Gazella walleri and Gazella dorcas, and the Plate (LVI.), will render further description unnecessary.

	G. walleri &.		G. dorcas S.	
	English inches.	metre.	English	metre.
Total length of skull From anterior rim of orbit to free	9.2	0.234	7.5	0.190
extremity of the præmaxillæ From anterior rim of orbit to the	4.3	0.108	3.6	0.090
occipital protuberance From centre of the external audi- tory meatus to occipital protu-	6.0	0.152	4.0	0.101
From the centre of external auditory	2.4	0.061	1.0	0.025
meatus to posterior rim of orbit	1.9	0.046	1.6	0.041
Length of the præmaxillæ	$2\cdot 1$	0.053	2.2	0.055
Length of basicranial axis From inferior rim of orbit to alveolus	3.7	0.093	2.8	0.071
of third upper molar Greatest depth of the rami of the lower jaw in the portion under-	.9	0.022	1.1	0.028
lying the molars	•6	0.015	.8	0.020
Length of diastema of the lower jaw	$2 \cdot 1$	0.053	1.4	0.035
Length of upper molar series	1.12	0.029	1.4	0.032
", ", ", premolar series ,, ,, lower molar series	.8	0.020	•8	0.020
	1.3	0.032	1.5	0.038
", ", ", premolar series …	.7	0.018	•8	0.020
Length of horns round the curve	12.0	0.302	9.0	0.230
Their circumference	4.4	0.111	3.8	0.096

# 3. Notes on the Anatomy of *Indicator major*. By A. H. GARROD, M.A., F.R.S., Prosector to the Society.

#### [Received October 25, 1878.]

Through the kindness of Mr. R. B. Sharpe I have had the opportunity of examining a spirit-preserved specimen of *Indicator major*, from Fantee, which enables me to lay before the Society some fresh facts in its anatomy confirmatory of its non-Cuculine affinities.

In his contributions to Orr's edition of Cuvier's 'Animal Kingdom' (1840), the late Mr. E. Blyth referred the Honey-guides to the Woodpeckers as their nearest allies '; and this idea was expanded by him two years later in the Journal of the Asiatic Society of Bengal<sup>2</sup>. In 'The Ibis' for 1870<sup>3</sup>, Mr. Sclater brought forward fresh facts in proof of the non-Cuculine affinities of the genus, and proposed to place it next to the Capitonidæ, with which, or with the Coliidæ, Mr. Blanford also in the same year showed it had its nearest relationships<sup>4</sup>.

The following observations tend to prove the correctness of the conclusions arrived at by the two last-mentioned ornithologists, and the error of imagining that *Indicator* is related to the Cuculidæ.

<sup>&</sup>lt;sup>1</sup> Loc. cit. p. 215. <sup>2</sup> Vol. xi. p. 167, 1842. <sup>3</sup> p. 176.

<sup>&</sup>lt;sup>4</sup> Observations on the Geology and Zoology of Abyssinia, 1870, p. 308.